

Map 4C  
Technology and Scatter  
Plots  
3.4 p. 168-179

Complete q 1-7 by hand p.175 and 176

Technology  
Example 3 p. 172  
  
Steps p. 514 Text  
or desmos app  
  
Hmk. q 9 p. 178

Mar 7-8:38 AM

Last year, twelve randomly selected students took a mathematics aptitude test before they began their college mathematics course. Their results on the aptitude test and their final mark in the course are shown in the table. All scores are out of 100.

Student	Aptitude Test Score	Final Mathematics Mark
A	95	86
B	73	68
C	59	61
D	68	70
E	84	90
F	80	87
G	82	71
H	64	60
I	66	72
J	50	45
K	74	74
L	64	53

- a) Make a scatter plot of the data and use linear regression to determine the equation of the line of best fit. Give the slope and vertical-intercept.
- b) How well does the regression equation fit the data? Explain.
- c) If Hannah scored 75 on the aptitude test, what would you expect her mark to be in her college mathematics course?
- d) If Pietro scored 40 on the aptitude test, what would you expect his mark to be in his college mathematics course?

Oct 7-7:29 AM

Example 2 Line of Best Fit

This table was posted in a fitness club and shows the estimated maximum possible heart rate during intense physical activity, based on the person's age.

Age (years)	10	20	30	40	50	60	70	80
Maximum Heart Rate (beats/min)	210	200	190	180	170	160	150	140

- a) Make a scatter plot of the data and classify the correlation.
- b) Use an algebraic method to determine an equation of the line of best fit.
- c) Describe how to use the equation.

Oct 7-7:31 AM

6. The data in the table were collected from a random selection of families in a community.

Total Income (\$1000s)	Percent Spent on Food
18.2	42.1
91.5	17.2
67.8	21.0
56.1	24.9
89.2	19.1
45.3	35.2
135.7	10.5
59.2	21.1
67.4	22.2
53.9	27.4

- a) Make a scatter plot of the data.
- b) Use technology to determine the equation of the line of best fit and the value of  $r$ .
- c) How well does the regression equation fit the data? Explain.

Oct 7-7:32 AM

Complete Task  
Fast as Lightning  
p.194 and conclude using Graphing Calculator  
Additional Steps and reesources p. 511

Complete Review Questions p190-191  
q. 1-13

Mar 19-7:23 AM

Mar 19-7:25 AM